Government of Bombay

Report

on the

Working of the Development Department

For the year ending 31st March 1929

[Price—Annas 3 *or* 4*d*.]

BOMBAY
PRINTED AT THE GOVERNMENT CENTRAL PRESS
1929

Obtainable from the Superintendent of Government Printing and Stationery, Bombay; from the High Commissioner for India, 42 Grosvenor Gardens, S.W.1, London; or through any recognised Bookseller

BOMBAY BRANCH
OF THE
Royal Asiatic Society.

Digitized with financial assistance from the
Government of Maharashtra
on 20 July, 2017

INTRODUCTION

The Annual Report of the Development Department for the year 1928-29 is divided into three parts :—

Part I.—The Back Bay Reclamation Scheme—submitted by the Chief Engineer, Back Bay Reclamation Scheme, with the report from the Chairman of the Sanitary Committee appointed in connection with the scheme.

Part II.—The Industrial Housing Scheme—submitted by the Land Manager, Development Department.

Part III.—The Suburban Schemes—submitted by the Commissioner, Bombay Suburban Division.

2. The Special Advisory Committee which was reconstituted in 1927 for the purpose of completing the enquiry which they had begun in 1924 submitted its report. This report was published for general information. A list of the members of the Committee is given in Appendix I.

3. In accordance with the recommendation made in paragraph 175 of the Mears' Committee's report, Government appointed a small committee to advise them on all matters regarding the Back Bay Reclamation Scheme which are referred to the committee for opinion. This committee again did useful work during the year. A list of the members of this committee is given in Appendix II.

The Back Bay Layout Committee appointed to consider and report on the proposals of the Consulting Surveyor to Government regarding the layout of blocks Nos. 1, 2 and 7 in the Back Bay Reclamation Scheme submitted a revised layout which is under the consideration of Government. A list of the members of this committee is given in Appendix III.

4. The Back Bay Reclamation Scheme remained in charge of the Chief Engineer, Back Bay Reclamation Scheme, under the control of the Development Department while the engineering aspects of the Industrial Housing Scheme and the Suburban Schemes which were committed to the charge of the Public Works Department in 1926-27 continued to remain with that Department under the Superintending Engineer, Northern Circle. The management of the Development Department chawls and the work in connection with town planning schemes continued to remain under the control of the Land Manager, Development Department. The work in connection with the

sale of land in the Back Bay Reclamation Scheme and the acquisition of land in Bombay City will be transferred to the control of Government in the Revenue Department during the year 1929-30. The management of the Industrial Housing Scheme will similarly be transferred from the Land Manager, Development Department, to the Collector of Bombay under Government in the Revenue Department and completed town planning schemes to Government in the General Department.

R. D. BELL,
Secretary to the Government of Bombay,
Development Department.

3rd May 1929.

APPENDIX I

Names of members of the Special Advisory Committee reconstituted for the purpose of completing their report on the Suburban Schemes for 1928-29.

	Name of member	Constituency
1.	R. D. Bell, Esq., C.I.E., I.C.S. ..	Secretary to Government, Development Department (Chairman).
2.	Sir Vasantrao A. Dabholkar, Kt., C.B.E., M.L.C.	The Bombay Municipal Corporation.
3.	Fazal Ibrahim Rahimtoola, Esq., B.A., M.L.A.	
4.	R. H. A. Delves, Esq., C.I.E., F.S.I.	The Bombay Improvement Trust.
5.	Major G. C. Richardson up to December 1928 and thereafter Mr. A. M. Reith.	The Bombay Chamber of Commerce.
6.	J. B. Petit, Esq., M.L.C. ..	The Millowners' Association, Bombay.
7.	Manu Subedar, Esq. ..	The Indian Merchants' Chamber, Bombay.
8.	L. U. Mongini, Esq. ..	The Bombay Presidency Trades' Association.
9.	W. H. Neilson, Esq., O.B.E. ..	The Bombay Port Trust.
10.	Rao Bahadur S. K. Bole, M.L.C. ..	Nominated to represent working classes in Bombay City.
11.	A. N. Surve, Esq., B.A., LL.B., Advocate.	Nominated by Government.
12.	Ig. D'Monte, Esq. ..	The Bandra Municipality.
13.	D. D. Rodrigues, Esq. ..	The Kurla Municipality.
14.	C. J. Hansoti, Esq. ..	The Ghatkopar-Kirol Municipality.
15.	Janmejay Chhabildas, Esq., M.A. (Camb).	The Notified Area Committees.

APPENDIX II

Names of members of the Standing Advisory Committee appointed to advise on all important matters regarding the Back Bay Reclamation Scheme for 1928-29.

	Name of member	Constituency
1.	Sir Leslie Hudson, Kt., J.P., M.L.C. (Chairman).	The Bombay Chamber of Commerce.
2.	Manu Subedar, Esq. ..	The Indian Merchants' Chamber, Bombay.
3.	J. B. Petit, Esq., M.L.C. ..	The Millowners' Association, Bombay.
4.	Hooseinbhoy A. Lalljee, Esq., M.L.C. ..	The Bombay Municipal Corporation.
5.	J. McClure, Esq. ..	Nominated by Government.
6.	J. W. Mackison, Esq., C.I.E., J.P.	
7.	R. H. A. Delves, Esq., C.I.E., F.S.I.	

APPENDIX III

Names of members of the Back Bay Layout Committee appointed to consider and report to Government on the layout of blocks 1, 2 and 7 in the Back Bay Reclamation Scheme for 1928-29.

Name of member

1. Dr. S. S. Batliwala, L.M. & S., J.P. (Chairman).
2. Sir Lelise Hudson, Kt., J.P., M.L.C.
3. Walchand Hirachand, Esq., J.P.
4. J. W. Mackison, Esq., C.I.E., J.P.
5. N. D. Kanga, Esq.
6. Hooseinally M. Rahimtoola, Esq., B.A., M.L.C., J.P.
7. C. W. E. Arbuthnot, Esq., B.E., B.A. (R.U.I.), J.P.
8. R. H. A. Delves, Esq., C.I.E., F.S.I.

PART I

BACK BAY RECLAMATION SCHEME

No. 1245 of 1929

DEVELOPMENT DEPARTMENT.

BACK BAY RECLAMATION SCHEME.

CHIEF ENGINEER'S OFFICE :

Old Customs House Yard, Fort,
Bombay, 3rd May 1929.

From

K. S. FRAMJI, Esquire, C.I.E.,
Chief Engineer, Back Bay Reclamation Scheme,
Development Department, Bombay ;

To

THE SECRETARY TO GOVERNMENT,
Development Department, Bombay.

Subject.—Annual report for 1928-29, Back Bay Reclamation Scheme.

Sir,

I have the honour to submit the following report on the works carried out in the Back Bay Reclamation Scheme during the year 1928-29.

Dredging Section

2. In accordance with the recommendation of the Advisory Committee, which was accepted by Government, the reclamation of Block No. 2 was undertaken, during the year under report, by wet or pumped filling. This was commenced on 2nd November 1928, prior to which the timber gantry for carrying the shore pipe lines, and the bund on the south side of Block No. 2 for closing the gap there and retaining the pumped filling, were constructed.

The work of constructing a new pipe gantry from the north-west corner of Block No. 2 to carry the discharge pipe line over the rocky foreshore, from the floating pipe line on to the sea wall, which was commenced on 26th February 1928, was completed on the 28th October 1928. Work on this gantry had to be suspended for some months owing to the heavy monsoon seas. That portion which had been constructed prior to the monsoon breaking withstood the heavy seas experienced and sustained no damage whatsoever.

Dredging operations in Back Bay for the season 1927-28 ceased on the 12th of April 1928.

The dredger "Kalu" was taken round to Back Bay for the new season's work 1928-29 on the 27th October 1928. The "Kalu" commenced dredging operations, cleaning out the berth for the booster

" Jinga " and pumping into Block No. 2 on Friday 2nd November 1928, working single-shifted. This work was completed on Thursday the 8th November, when the floating pipe line was disconnected. The " Kalu " was moved to her new dredging position on Friday the 9th November 1928. The booster " Jinga " was brought into her position on Saturday the 10th November 1928, when the work of coupling up the floating pipe line from this vessel to the shore and to the dredger was commenced. This was completed on Tuesday the 13th November and dredging operations were re-commenced on Wednesday morning the 14th November.

Considerable delay has been experienced throughout the season owing to the bursting of the old 39" diameter and 42" diameter floating pipes which had worn very thin. It was estimated, in 1927, to spend about 1½ lakhs of rupees on the renewal of these pipes during the monsoon season of 1928. As it was subsequently decided that dredging operations should cease at the end of the present season, a careful inspection of the floating pipes was made. As a result of this inspection, it was estimated that by replacing pipes, as they burst, with others, it would be possible to carry on dredging operations for the present season without renewing any pipes and without seriously affecting the estimated output. The estimated output for the season was 1,000,000 cubic yards. The actual quantity removed from Back Bay during the season was 1,084,588 cubic yards.

Dredging operations ceased on the evening of Thursday the 28th March when the sloping pipe connecting the floating pipe line to the shore was pulled out of the socket and damaged owing to the heavy swell.

The fact that 1½ lakhs of rupees had been saved on repairs and renewals to the floating pipe line alone and that the old pipes have lasted out this season points to very close estimating and vigilance exercised by the dredging section. The performance of the dredging plant in Back Bay, from the commencement, is shown below :—

Seasons	Number of pumping hours worked	Quantity of material dredged as ascertained by soundings	
		Per Season	Per pumping hour
		C. yds.	C. yds.
" Kalu "			
1924-25	111	15,640	141
1925-26	918	372,925	406
1926-27	553	220,072	398
" Kalu " and " Jinga "			
1927-28	1,702	1,016,219	597
1928-29	1,622-55	1,084,588	668

It will be observed that the "Kalu" has given very satisfactory results in this the last year of its working. The unit cost, too, has been low, being just under 11 annas per cubic yard.

Government are in communication with various authorities, including the High Commissioner for India, for the sale of the dredgers. One steam launch has already been sold.

Dry filling.—This was the principal work carried out during the year. During this year it has been done entirely by a contract which was referred to in last year's report. The contractors are Messrs. Mugaseth & Sons and they commenced operations under their contract on the 1st December 1927. The essence of their contract is that they shall obtain the murum or earth required for the dry filling from their own lands or else pay the necessary fees if they obtain it from other persons' lands, and that they shall make all arrangements for and bear all costs in connection with the excavation, transportation and deposition in place in the reclamation of this dry filling. They get this dry filling from two places, *viz.*, Kandivli and Malad, both on the B. B. & C. I. Railway, about 20 miles from Bombay. All arrangements at Malad are entirely in their own hands, and they laid the sidings connecting the Malad quarry to the B. B. & C. I. Railway; at Kandivli, however, although the dry filling is excavated from lands not belonging to Government, running rights over the Government sidings have been given to the contractors.

Between the 1st of April 1928 and the 31st of March 1929, the total quantity of dry filling brought in by the contractors was 12,35,000 tons, and a ton may be taken to be roughly the equivalent of 1 cubic yard of the material. The total cost of this material to the Development Department during the year under report has worked out at about Rs. 1-3-0 per ton or per cubic yard, excluding any allowance for the original capital cost of the rolling stock and other plant and machinery which is lent to the contractors, and also excluding any depreciation on this plant and machinery. This material has been deposited as follows:—

	Tons.
In block 8 on the top of the dredged filling with which the block was partially filled	10,55,000
In block 7 mostly for the small repairs to the sealing of the sea-wall	3,000
In block 2 for sealing the sea-wall and for making a cross-bund at the south-end of that block in order to retain the dredged material in that block ..	1,77,000

The total area of Block 8 is 11,84,000 square yards, and the total contents of Block 8 were estimated to be about 43,00,000 cubic yards. Up to the 1st of April 1928, 18,68,000 cubic yards of dry filling had been put into Block 8, with which an area of approximately 7,00,000 square yards had been covered and brought up to the formation level, and on that date an area of approximately 4,00,000 square yards yet remained

to be done. With the 10,55,000 tons or cubic yards of material that were put into Block 8 during the year under report an area of approximately 3,67,000 square yards have been covered and brought up to the formation level, giving an average depth of deposition of dry filling during the year of approximately 3 yards. This depth is about ¾ yard deeper than the material deposited in previous years, owing to the fact that, during this year, the material was put in into portions of the block where the dredged material was softest, and therefore sank more into that dredged filling than was the case in previous years. At the end of the year under report the area of Block No. 8 that yet remained to be done was about 50,000 square yards. It is satisfactory to note that the dry filling of Block No. 8 has subsequently been completed on 2nd May 1929, and the block has been reported as now ready for being handed over to the military authorities.

In Block No. 7 the dredged filling has dried out and sunk to a material extent about 4 feet average depth, and in doing this it has withdrawn from the rubble mound under the sea-wall and from the dry filling that had been deposited against that rubble mound to act as a seal. The result was that a certain amount of leakage was experienced through that rubble mound. A railway line was laid over the sea-wall towards the end of the year and arrangements made to tip dry filling off the sea-wall along the rubble mound so as to seal it again as soon as any dry filling could be spared from the portions in Block 8. A small amount of this work was done before the end of the year and the balance is being put in and will be completed before the monsoon of 1929.

In addition to the dry filling brought in by train, about 1,11,000 cubic yards of dry filling were deposited from motor lorries in Blocks 1 and 2 at an average cost of about Re. 0-10-0 per cubic yard. This consisted of building rubbish brought in by various contractors from buildings, etc., in course of demolition and provides an economical, though not very plentiful, material for reclamation.

Storm water drains.—The storm water drain No. 6 which was referred to in last year's report was successfully brought to completion with a saving on the estimated cost.

Other works.—The only other work calling for particular mention was the maintenance of the sea-wall. During the monsoon of 1928 the rubble mound under the sea-wall between Marine Lines and Churchgate stations sank to a certain extent and thereby undermined the mass concrete wall on the top of it. The holes thus made were filled up and a considerable quantity of rubble was tipped in front of the rubble mound in order to make good the shrinkage that had occurred. Sinkage of this rubble mound and the protective apron of heavy stone blocks in front of it may probably be expected for a number of years to come; but provided that remedial measures are applied at once it is not anticipated that any serious damage should occur to the mass concrete wall above it.

A certain amount of plant and machinery was sold off during the year, and considering the state of the market and the fact that this plant and machinery was bought at a most expensive period, satisfactory prices were realised for it.

I have the honour to be,

Sir,

Your most obedient servant,

K. S. FRAMJI,

Chief Engineer,

Back Bay Reclamation Scheme.

REPORT OF THE WORK DONE BY THE SANITARY COMMITTEE, BACK BAY RECLAMATION SCHEME, FROM 1ST APRIL 1928 TO 31ST MARCH 1929

During the year eight meetings of the Committee were held at the Back Bay House and the reclamation works were also inspected with the Chief Engineer and the Medical and Sanitary Officer, Back Bay Reclamation Scheme.

2. During the absence of Lieutenant-Colonel F. P. Mackie, O.B.E., M.D., V.H.S., I.M.S., on his transfer to Simla as Public Health Commissioner to the Government of India, Sir Nasarvanji Choksy, Kt., C.I.E., M.D., was appointed acting Chairman under Government Resolution No. S.A. 1059, dated the 26th May 1928. Sir Nasarvanji continued as Chairman for the whole official year.

3. On return from Simla, Colonel F. P. Mackie, O.B.E., M.D., V.H.S., I.M.S., resigned the post on his appointment as officiating Surgeon General with the Government of Bombay. The Committee placed on record their appreciation of his services in the following resolution on 7th February 1929 :—

"The Committee offer their best thanks to Colonel F. P. Mackie, O.B.E., M.D., V.H.S., I.M.S., for the very valuable services rendered by him as Chairman of the Sanitary Committee, Back Bay Reclamation Scheme, and place on record their appreciation of the zeal, ability and courtesy with which he discharged the duties of Chairman for the last five years."

4. Government under their Memorandum No. B-1/7-S.C., dated 11th April 1928 sanctioned the grant of Rs. 350 for contingent expenditure of the Committee for the official year 1928-1929.

5. Captain B. S. Chalam, Medical and Sanitary Officer, Back Bay Reclamation Scheme, resigned the post on his appointment as malariologist, E. B. Railway. The Committee passed the following resolution :—

"The Committee place on record the valuable services rendered by Captain Chalam during his service of five years in the Development Department. He has proved himself an able officer and has been successful in controlling the mosquito and malaria incidence in a satisfactory manner."

6. Government were of opinion that "as (1) the work had been systematised and (2) the Back Bay Reclamation Scheme curtailed they did not think that Captain Chalam should be replaced by a full time officer. His work could either be done by a Sub-Assistant Surgeon in addition to his ordinary duties or by a part-time officer."

The Committee passed the following resolution upon the above :—

"The Committee do not approve of the appointment of an officer of the Sub-Assistant Surgeon class as in their opinion such an officer will not be able to carry any prestige, and as he shall have to deal with

the military and municipal officers, an officer of higher standing is necessary."

2. "A half-time officer devoting four hours a day specially in the mornings from 7-30 a.m. to 11-30 a.m. in addition to emergent work for casualties and accidents may be appointed."

3. "The salary of such an officer may be fixed at Rs. 450 *plus* Rs. 150 motor allowance per month."

4. "Applications by advertisements be invited for the post of a malariologist with experience of practical anti-mosquito work, etc."

7. Out of 32 applications received, the Committee interviewed four applicants and ultimately selected Dr. H. D. Khote, M.B.B.S., L.M., M.R.C.P., F.C.P.S., Professor of Hygiene, Grant Medical College. He was appointed by Government under Government Resolution No. S. A. 1199 of 21st June 1928 as part-time Sanitary and Medical Officer in connection with the Back Bay Reclamation Scheme on a salary of Rs. 450 *plus* Rs. 150 motor allowance per month.

8. Complaints about the old and the new cooly camps were again received from the military authorities. It was therefore arranged that the coolies of the old camp in the Back Bay House should not be allowed to trespass on the military grounds; as regards the new camp on the extreme west face of Block No. 8, it was decided that sufficient water closet and washing place accommodation should be provided before the camp was occupied.

9. On the occurrence of several cases of cholera in the city in August 1928, about 502 labourers were inoculated against cholera.

10. On a complaint from the Deputy Secretary to the Government of Bombay, Development Department, regarding "construction of an overflow arrangement from the manhole at the junction of Napier and Beach Roads at Colaba" the Committee investigated the question and resolved as under:—

"The Committee agrees with the opinion of the Chief Engineer, Back Bay Reclamation Scheme, that the Municipality should construct a special overflow sewer of the required size from Beach Road, as far out into the sea as possible above the tides with properly sealed manholes and flushing arrangement within a period of two years."

2. "The Sanitary Committee is further of opinion that the proposed temporary arrangement is highly objectionable on sanitary grounds as shown by experience in the past. That pending the completion of the scheme as above suggested, a small committee consisting of the Chief Engineer, Back Bay Reclamation Scheme, Municipal Drainage Engineer, the Garrison Engineer and the Executive Health Officer be requested to report upon the best means of mitigating the nuisance."

The sub-committee met on 21st January 1929 when after discussion it was unanimously agreed to approve the proposal in the following

notes prepared by the Municipal Drainage Engineer. These notes were then forwarded to Government :—

"The sub-committee having agreed to the proposal of the Municipality for allowing an overflow of sewage from the manhole at the junction of Napier Road and Beach Road, subject to the modification that the connection should be made direct to the 5′ circular main storm water drain instead of the 18″ S. W. pipe drain as proposed, I now put forward the details of my suggestions together with drawings to illustrate my proposals for safeguarding as far as possible and practicable against the danger of the nuisance from such a connection."

2. "In the drawing marked DD/7-1-29 the proposed connection is indicated and which the Municipality may be allowed to instal."

3. "At present the main 5′ circular S.W. drain has only concrete slabs to serve as covers over manholes and are not air-tight. These manholes should be covered up with proper air-tight frames and covers of the municipal pattern."

4. "The construction of the subsidiary and cutcha open drains are made at present direct to the main storm water drain. These branch drains should be intercepted by trapped chambers as shown on the accompanying drawing marked DD/21-12-28."

5. "To further safeguard against the exit of any foul gases the provision of vent shafts of the design proposed in drawing marked DD/ 20-12-28 is suggested and their number be limited to two for the present, one at the manhole on the main storm water drain where the connection is proposed to be made, and the other at the head of the main S.W. drain."

6. "As for sharing of the costs of the respective proposals outlined in paragraphs 2, 3, 4 and 5, I am of opinion that the cost for the work mentioned in paragraphs 2 and 3 should be borne by the Municipality whilst as for that in paragraph 4 it should be done at the cost of the Bombay Development Department. As for the provision of vent shafts as outlined in paragraph 5 above the cost should be shared equally by the Municipality and the Bombay Development Department."

11. In October 1928 there were several cases of malaria amongst coolies imported from Kandivli in the new camp. An intensive course of quinine treatment was enforced under the personal supervision of the medical staff and the epidemic subsided in a few days.

12. The labour force connected with the scheme was housed in three separate camps, one at Charni Road and two at Colaba. The average total strength during the year was approximately 1,970.

13. There were no special diseases prevalent in these camps except one case of plague in February 1929. 864 persons were then inoculated against plague. There were 42 deaths amongst the inmates from general diseases, 9 being from pneumonia.

14. The anti-malarial operations consisted of regular inspections and treatment of all actual and likely breeding places of mosquitoes. Weekly

house to house inspection was made in Colaba and Marine Lines reclamation areas. At every such inspection a questionnaire card was presented to the occupants of the houses where they were required to state if they were troubled with mosquitoes. Very few adult mosquitoes were caught during these inspections.

15. During the rainy season a few larvae of anopheles mosquitoes were detected here and there in the fissures and pools in the reclaimed areas but they were not allowed to reach the pupal stage and the areas were frequently treated with larvacides.

16. The following table shows the ratio of admission per 1,000 of strength for malaria amongst the British troops in the British Military Hospital, Colaba, Bombay :—

Before the commencement of reclamation anti-malarial operations		After the commencement of reclamation anti-malarial operations	
Year	Ratio	Year	Ratio
1921	972·46	1923	152·53
1922	387·14	1924	238·27
		1925	165·05
		1926	180·48
		1927	150·41
		1928	98·06

17. The spleen and parasite rates of the children in the Colaba reclamation camp in 1928 were :—

(*A*) *Spleen rate.*—Only in 15 cases the spleen was found enlarged, giving a percentage of 20·00.

(*B*) *Parasite rate.*—Out of 37 children examined parasites were found in two giving a percentage of 5·4.

18. The anti-malarial staff consisted of one medical and sanitary officer, one malaria inspector and 12 coolies.

19. The sanitary staff consisted of one sanitary inspector and 22 sweepers. (One sub-inspector retrenched since 16th October 1928.)

20. The medical staff consisted of one sub-assistant surgeon, two compounders and three dispensary servants.

21. *Cost of operations—*

Medical and sanitary officer at Rs. 450 per month.

Motor allowance Rs. 150 per month.

In 1928-29	Rs.
Medical	3,680
Anti-malarial	6,120
Sanitary	11,390

22. Dr. H. D. Khote's report on the medical and sanitary transactions for the year is attached hereto. His work was satisfactory.

23. The Committee again cordially acknowledge the valuable services rendered by Dr. K. B. Shroff, L.M. & S., D.P.H., D.T.M., J.P., as honorary secretary since its inception six years ago and desire that they be once again brought to the favourable notice of Government.

K. B. SHROFF,
L.M. & S., D.P.H., D.T.M.,
Honorary Secretary,
Sanitary Committee,
Back Bay Reclamation Scheme.

NASARVANJI CHOKSY,
Chairman,
Sanitary Committee,
Back Bay Reclamation Scheme.

Annual report of medical and sanitary transactions for the year ending 31st December 1928

The medical and sanitary and anti-malarial operations connected with the Reclamation Scheme were in my charge since 23rd June 1928. From January to June they were under the charge of Captain B. S. Chalam. The labour connected with the Scheme is housed in three separate camps situated, one behind Charni Road Station and the other two at Colaba. Besides these there is one more temporary camp erected on the sea wall at Colaba. The superior and subordinate connected with the scheme, the labour engaged on the works and the crew on the dredger, all these get free medical attention and the average total strength of persons under these categories during the year under report was approximately 1,970. In addition to these one more camp situated at Kandivli came under our charge since 8th March 1928 last. There are about 2,000 coolies working there; all the Government coolies working there get free medical treatment.

Hospital accommodation.—An out-door dispensary is attached to each of three reclamation camps. Indoor hospital accommodation is not provided, but serious cases requiring prolonged treatment or major operations are sent to any of the local civil hospitals. The total number of cases sent to the civil hospitals from the reclamation camps during the year under report was 14. One bed however is equipped at each of these dispensaries to receive any serious case till such time as arrangements can be made to send it to the civil hospital.

The total number of out-patients during the year was as follows:—

New cases only	..	6,396
Old and new cases	..	20,522

The number of minor surgical operations performed during the year was 73.

Prevailing diseases.—A very large majority of the cases attending the dispensaries consists of minor injuries which is to be expected from the

nature of the work they are engaged in. Cases of mumps occasionally occur among the children of the coolies.

There was only one case of plague in Lascar Lines camps in February 1928. With the exception of this, there was no epidemic of any disease in any of the camps during the year under report.

Inoculation against plague was carried out amongst the coolies after the occurrence of the case. In all about 864 persons were inoculated in February.

There was an epidemic of cholera in Bombay in September; as a protective measure, all the coolies, women and children in the Colaba camp were inoculated against cholera. The total number of persons inoculated was 502.

Deaths.—The total number of deaths in the camps during the year under report was 42.

Congenital debility	3
Cirrbosis of liver	1
Infantile convulsions	3
Rickets	3
Congenital syphilis	1
Pneumonia	9
Broncho pneumonia	10
Dysentery and diarrhœa	7
Asthma	1
Still-born	1
Miscarriage	1
Malaria	1
Plague	1
Total	42

Sanitation.—One day every week is set apart in each camp when every room is emptied, bedding, boxes, etc., are brought out and a disinfectant sprayed all over.

Dust bins with well fitting lids are put on raised cement platforms in sufficient numbers for each row of rooms to prevent accumulation of rubbish in and about the rooms. All latrines are of the flushing type. Separate latrines and bathing places are provided for men and women.

Rat destruction is carried out throughout the year by setting traps in the camps and thus a good number of rats is accounted for. Bazars in the camps are under strict supervision and all eatables such as sweets, cakes, etc., are required to be kept under glass cases.

Anti-malarial operations.—As usual the anti-malarial operations consisted of regular inspection and treatment of all actual and likely

breeding places created during the rainy season on the reclaimed land; the most important permanent breeding places in this area are :—

(1) Large and deep fissures on the reclaimed soil.
(2) Large pools formed at the junction of the dredging pipes.
(3) And the key holes all along the sea wall.

Paris green and larvacides were used when and where necessary and breeding was effectively checked thereby.

Weekly house to house inspection is made in the Colaba and Marine Lines reclamation areas; at every such inspection a questionaire card is presented to the occupants of the houses where they are requested to state if they are troubled by mosquitoes. The results of these operations so far are very satisfactory as can be seen from the statistics received from the British Military Hospital at Colaba. The ratio of admissions per 1,000 of strength for malaria amongst the British troops in Bombay in 1928 was 98·06. This figure compares very favourably with previous years and is the lowest since the commencement of the anti-malarial operations in Colaba. The following table compares this ratio with that of the previous years :—

Ratio of admissions per 1,000 of strength for malaria amongst British troops in Bombay

Before the commencement of Reclamation anti-malarial operations		After the commencement of Reclamation anti-malarial operations	
Year	Ratio	Year	Ratio
1921	972·46	1923	152·53
1922	387·14	1924	238·27
		1925	165·05
		1926	180·48
		1927	150·41
		1928	98·06

Spleen and parasite index of the Colaba reclamation camp taken in 1928 was as follows :—

Age	Nos. examined	Not palpable	One finger	2 to 3 fingers	Hands breadth	Up to umbilicus	Percentage
Under 2 years ..	31	24	3	4	..	..	22·54
Between 3 and 5 years ..	21	16	2	2	..	1	23·80
Between 6 and 10 years ..	23	20	..	2	..	1	13·04
Total ..	75	60	5	8	..	2	20·00

Parasite rate	No. examined	Parasite found	Percentage
Age under 5 years	16	1	6·2
Between 6 and 10 years	21	1	4·7
Total ..	37	2	2·7

Staff and cost of operation.

The staff consisted of the following :—

Medical and Sanitary Officer ..	.. 1
Sub-Assistant Surgeon ..	.. 2 (one retrenched since 5th September 1928.)
Sanitary Inspector ..	.. 1
Sanitary Sub-Inspector ..	.. 1 (one retrenched since October 1928.)
Compounders ..	.. 2 (another appointed 16th July 1928.)
Dispensary servants ..	.. 3
Sweepers ..	.. 21
Anti-malarial coolies ..	.. 12

	Estimated expenditure for the year 1928-29	Amount actually spent during 1928-29
Sanitary	13,390	11,390
Anti-malarial	9,120	6,120
Medical	4,680	5,680

Medical and Sanitary Officer	.. Rs. 450 per mensem; car allowance Rs. 150 per mensem.
Sub-Assistant Surgeon ..	.. Rs. 109; Rs. 30 Duty allowance; Rs. 10 Bombay allowance; 75 personal pay per mensem.
Sanitary Inspector ..	.. Rs. 250 per mensem; Rs. 5 cycle Allowance.
Sanitary Sub-Inspector ..	.. 150 per mensem.
Compounder at Colaba ..	.. Rs. 50 per mensem.
Compounder at Marine Lines	.. Rs. 50 per mensem.

Members of the Sanitary Committee, Development Department, for 1928-29

1. Sir Nasarvanji Choksy, Kt., C.I.E., M.D. (Chairman),
2. Major S. S. Sokhey, M.D., I.M.S., Director, Haffkine Institute,
3. Lieut.-Colonel W. M. Houston, M.B., B.Ch. D.P.H., D.T.M., I.M.S., Port Health Officer,
4. Dr. J. E. Sandilands, M.C., M.D., D.P.H., Executive Health Officer Bombay Municipality,
5. Major R. A. Anderson, M.B., F.R.F.P.S., R.A.M.C.,
6. Lieut.-Colonel R. Row, O.B.E., M.D.,
7. Dr. H. M. Masina, L.M. & S., F.R.C.S.,
8. Dr. P. A. Dalal, L.M. & S., D.T.M. & H.,
9. Dr. Sorab C. Hormusjee, M.D., D.P.H.,
10. Dr. J. S. Nerurkar, B.Sc., L.M. & S., D.P.H. (Cantab), Deputy Executive Health Officer, Bombay Municipality, in charge of the municipal anti-malarial operations,
11. Dr. K. B. Shroff, L.M. & S., D.P.H., D.T.M. (Honorary Secretary).

PART II

INDUSTRIAL HOUSING SCHEME

No. L.M. 100

OFFICE OF THE LAND MANAGER,
DEVELOPMENT DEPARTMENT:
Old Custom House Yard, Fort,
Bombay, dated the 3rd May 1929.

From

R. D. BELL, Esquire, C.I.E., I.C.S.,
Land Manager, Development Department;

To

THE SECRETARY TO THE GOVERNMENT OF BOMBAY,
Development Department.

Subject:—Annual report on the administration of the Industrial Housing Scheme for the year 1928-29.

Sir,

I have the honour to submit the annual report on the administration of the Industrial Housing Scheme for the year ending the 31st March 1929. The scheme comprises 207 chawls of 80 rooms each (with one exception of 64 rooms) in four different areas:—

TABLE I

Chawl areas

	Chawls	Rooms
DeLisle Road	32	2,560
Naigaum	42	3,344
Worli	121	9,660
Sewri	12	960
Total ..	207	16,524

Chawls in use

2. The progress in opening new chawls during the last year was checked by the partial mill-strike in January 1928 and this was followed by a severe set back due to the prolonged general mill-strike which lasted from April to October 1928 and to the generally disturbed industrial conditions thereafter. The figures of occupied chawls in each area

at the beginning and at the end of the year under report are as follows :—

TABLE II

Chawls in use

Locality	April 1928	March 1929
DeLisle Road	28	27
Naigaum	37	40
Worli	46	45
Sewri	12	12
Total ..	123	124

During the year under report one chawl at DeLisle Road and one chawl at Worli were closed owing to loss of tenants during the strike. At Naigaum three new chawls were opened including one in which the Parsi Federal Council have taken 40 rooms for their community. The effects on tenancies of the mill-strike and the disturbed aftermath and riots in February are shown in paragraph 4.

Scale of rents

3. The scale of rents remained unchanged throughout the year as follows :—

TABLE III

Scale of rents in March 1929

Floors	DeLisle Road	Naigaum	Sewri	Worli
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Ground, first and second floor rooms	9 8 0	7 0 0	7 0 0	5 0 0
Top floor rooms	9 0 0	7 0 0	7 0 0	5 0 0

At the close of the year under report it was decided to reduce, with effect from the 1st April 1929, the rents for rooms on all floors at DeLisle Road to Rs. 8 per room per mensem.

Tenancies

4. The following statement shows the number of rooms actually occupied during the last week of each month throughout the year :—

TABLE IV

Numbers of occupied rooms

Chawl centre	Rooms constructed	Rooms occupied on 31st March 1928	Number of occupied rooms (including shops) month by month				
			1928				
			April	May	June	July	August
Naigaum ..	2,344	2,363	2,308	2,154	2,046	2,068	2,059
DeLisle Road ..	2,560	1,761	1,711	1,523	1,421	1,382	1,352
Worli ..	9,660	2,692	2,561	2,348	2,294	2,280	2,276
Sewri ..	960	862	881	850	821	825	806
Total ..	16,524	7,678	7,461	6,875	6,582	6,555	6,493

Chawl centre	Number of occupied rooms (including shops) month by month—*contd.*							Increase *plus* or Decrease *minus*
	1928—*contd.*				1929			
	September	October	November	December	January	February	March	
Naigaum ..	2,042	2,195	2,229	2,260	2,265	2,264	2 210	—153
DeLisle Road ..	1,304	1,361	1,466	1,472	1,450	1,337	1,318	—443
Worli ..	2,212	2,515	2,667	2,677	2,646	2,533	2,498	—194
Sewri ..	820	848	871	873	819	780	779	—83
Total ..	6,378	6,919	7,233	7,286	7,180	6,914	6,805	—873

On 31st December 1927 the total number of tenants in all areas, 8,234, was the highest ever recorded. A partial mill-strike broke out on 1st January 1928 and over 500 tenants disappeared in the following two months. There was then a lull of six weeks during which tenancies remained steady till the general mill-strike broke out in mid-April. By the end of September another 1,300 tenants had disappeared making a total loss of over 1,800 in nine months. About 900 returned in October and November when there was a check due to unrest at Sewri. This was followed by the riots of February last when between 400 and 500

tenants left. On the 31st of March 1929 tenancies were nearly 900 less than on 31st March 1928 and 1,400 less than on 31st December 1927.

Three chawls at Worli were placed at the disposal of the Police Department for accommodating under-trial prisoners from 11th February 1929 to 23rd March 1929 and suspicious characters arrested during the riots in February. These have not been included in the above table as the occupation was temporary. The financial effect of the loss in tenancies owing to industrial unrest and unsettled conditions is discussed below (paragraphs 9 and 11).

Two and three-roomed tenements

5. Out of the two chawls converted into two and three-roomed tenements as an experimental measure—one at Naigaum and the other at DeLisle Road—the chawl at Naigaum continued to be fully let as in the previous year as two-roomed tenements with the odd rooms let singly, but the chawl at DeLisle Road is still mostly vacant. The rooms in the chawl at Naigaum leased to the Parsi Federal Council have been fitted with intercommunicating doors so that they can be converted into two and three-roomed tenements when necessary. As there appears to be a demand for this kind of accommodation at Naigaum it is proposed to make similar alterations in another chawl in this area.

Shops

6. At DeLisle Road, there are only 11 shops and they are all let. In other areas the number of occupied and vacant shops is as under :—

TABLE V

Shops

Locality	Total number of shops					
	Occupied on 31st March 1929			Vacant on 31st March 1929		
	Single	Double	Triple	Single	Double	Triple
Naigaum	9	3	3	38	6	..
Worli	42	8	..	96	15	..
Serwi	16	3	..	14	2	..
Total ..	67	14	3	148	23	..

The abnormal fall in tenancies caused a corresponding decrease in the number of occupied shops. Seven shops at Naigaum, sixteen at Worli and two at Sewri were vacated during the year. The shops are expected to be re-occupied as tenancies increase and normal conditions are re-established.

Market at Worli

7. The market at Worli comprises 103 stalls for the sale of mutton, fish and vegetables. At the end of the year 20 stalls were occupied as against 15 at the end of the last year. The market has not so far been a

success. A re-arrangement of the stalls has now been made in order to induce shopkeepers other than sellers of mutton, fish and vegetables to use the market.

Rent collections

8. The following table shows the assessment and recoveries of rents, month by month, during the year :—

TABLE VI

Rent collections

Month	Assessment of occupied rooms	Collection	Percentage of recovery
1928	Rs.	Rs.	
April	54,304	53,835	99
May	49,445	29,853	60
June	46,952	26,818	57
July	45,746	28,076	61
August	45,657	21,152	46
September	44,716	19,782	44
October	45,160	44,091	98
November	49,524	45,647	92
December	50,413	34,648	69
1929			
January	49,966	53,740	108
February	48,233	44,113	91
March	46,761	46,160	99
Total ..	5,76,877	4,47,915	78

Year	Assessment of occupied rooms	Collection	Percentage
	Rs.	Rs.	
1927-28	6,70,251	6,54,520	98
1926-27	5,04,102	4,94,286	98
1925-26	4,15,598	3,46,636	84
1924-25	4,70,417	3,74,561	79
1923-24	2,64,448	2,06,514	78

9. The percentage of collections on the assessment of occupied rooms for the year was 78 approximately as against 98 for the previous two years. This result is due entirely to the prolonged mill-strike, the subsequent disturbed conditions and the riots in February 1929. In the case of mill-hands who did not vacate their rooms and remained unemployed during the strike no coercive measures, such as attachment of property or eviction proceedings, were taken. The collections improved after the mill-strike was over as shown by the figures for October and November. In December there was a fall because the mill-hands did not receive any pay in that month. The collections from January onwards have been better. Considering the extraordinary character of the year the collections were not unsatisfactory and compare favourably with those of the years 1923-24, 1924-25 and 1925-26. In

the last two of these years there were mill-strikes but conditions were not nearly so acute as in 1928-29.

Abscondency

10. The arrears left by absconding tenants are an indication of the extent to which bad debts accrued during the year. The following statement shows the number of absconders and the amount due by them, month by month, in each case :—

TABLE VII

Statement of abscondency

Locality	Number of absconders and the amount lost during the month of											
	April 1928		May 1928		June 1928		July 1928					
	No.	Amount	No.	Amount	No.	Amount	No.	Amount				
		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.				
Naigaum ..	94	525 8 0	106	837 0 0	69	747 8 0	49	640 4 0				
DeLisle Road ..	49	895 8 0	89	1,316 4 0	44	877 8 0	42	1,268 8 0				
Worli ..	99	422 0 0	131	904 4 0	97	783 0 0	47	579 0 0				
Sewri ..	8	39 0 0	48	287 0 0	11	119 0 0	14	133 0 0				
Total ..	250	1,882 0 0	374	3,344 8 0	221	2,527 0 0	152	2,620 12 0				

Locality	Number of absconders and the amount lost during the month of							
	August 1928		September 1928		October 1928		November 1928	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.
Naigaum ..	50	792 8 0	69	1,387 8 0	80	1,935 8 0	72	2,106 8 0
DeLisle Road ..	32	1,064 0 0	42	1,823 0 0	57	2,704 0 0	41	2,132 12 0
Worli ..	35	464 8 0	102	2,026 8 0	50	1,017 0 0	64	1,452 8 0
Sewri ..	17	205 8 0	12	123 8 0	14	179 0 0	12	204 0 0
Total ..	134	2,526 8 0	225	5,360 8 0	201	5,835 8 0	189	5,895 12 0

Locality	Number of absconders and the amount lost during the month of							
	December 1928		January 1929		February 1929		March 1929	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.
Naigaum ..	61	2,044 8 0	69	1,916 0 0	152	3,938 8 0	95	2,617 12 0
DeLisle Road ..	13	842 4 0	44	2,306 5 0	125	5,142 12 0	42	2,042 0 0
Worli ..	75	1,317 8 0	106	2,339 0 0	125	2,415 12 0	70	1,604 8 0
Sewri ..	13	190 0 0	70	721 0 0	36	456 8 0	32	501 0 0
Total ..	162	4,394 4 0	289	7,282 5 0	438	11,953 8 0	239	6,765 4 0

11. The total amount due from the absconders in the year was Rs. 60,388 as against Rs. 14,394 in the previous year and Rs. 70,238 in the strike year 1925-26. The abnormal increase in the number of absconders and the amount of arrears of rent due from them was due to the strike. When the strike was over and the mills re-opened, steps were taken to trace the absconders and to recover arrears from them. The amount thus recovered was Rs. 2,094. The net amount still to be recovered, therefore, is Rs. 58,294 or about 10 per cent. of the total assessment of the year. The rise in abscondency in the months of January and February 1929 was due to many tenants, especially mill-hands, who had accumulated arrears during the strike period disappearing, partly perhaps to evade payment of arrears and partly on account of the disturbed conditions and riots which occurred in these months. Tenants who have fallen into arrears during a strike tend to abscond sooner or later.

Writes-off

12. The total amount written off during the year was Rs. 20,950 on account of irrecoverable arrears of previous years, as against Rs. 27,656 during the preceding year. The total arrears recoverable and irrecoverable on 31st March 1929 were Rs. 1,65,088-5-9 as against Rs. 57,022-3-7 on 31st March 1928.

Establishment charges

13. Excluding the Secretariat staff the establishment charges for the year including the staff for management, rent collection, court work and sanitation amounted to Rs. 84,642, or 14·7 per cent. of the assessment of Rs. 5,76,877 made up as follows :—

Assistant Land Manager, Chawl Superintendents, peons and night watchmen	6·2 per cent.
Sanitary staff	6·3 ,,
Court clerk, clerks, trackers and peons ..	1·2 ,,
Accounts staff (under the Audit and Accounts Officer, Bombay Development Scheme) ..	1 ,,

The sanitary staff comprises one sweeper for each chawl, a mucadam in charge of 20 chawls, and for the present one sanitary inspector for the purpose of supervision. The expenditure on sanitary stores amounted to Rs. 6,404 giving a percentage of 1·1 per cent. to the assessment.

Repairs and maintenance

14. No new works beyond minor additions and alterations were carried out in the chawls. A programme was laid out for stopping leakages from roofs and walls; the whole of this programme was completed, and it is expected that the rooms in the chawls will be more comfortable during the next monsoon. The total expenditure on repairs (including the special programme mentioned above) and maintenance of chawls was Rs. 68,500 as against Rs. 73,000 during the previous year. The municipal taxes amounted to Rs. 99,720.

Accounts

15. The accounts of the year are not yet complete. They will be published later as part of the capital and revenue accounts of the Development Department.

Amenities

16. Schools are established at Naigaum, DeLisle Road and Worli. The Infant Welfare Society, the Y. M. C. A., the Y. W. C. A. and the Hindu Maha Sabha are doing excellent work in the chawl areas. The Bombay Presidency Boy Scouts Association have opened a section in one of the chawls at Worli and are doing very good work among the boys there. The establishment of two police chowkies at Worli, as stated in the report of the last year, has also been greatly appreciated by the tenants and police protection of this area is quite satisfactory. A municipal dispensary at Worli is freely used by the tenants.

VITAL STATISTICS AND SANITATION

TABLE VIII

17. *Vital statistics*

Locality	Approximate population	Deaths	Death rate per 1,000 (approximately)
1	2	3	4
Naigaum	10,930	279	25·5
DeLisle Road	7,065	154	21·8
Worli	11,865	296	24·5
Sewri	4,035	50	12·4
Total ..	33,895	779	23·0

The population figures in column 2 are approximately the averages of the monthly tenancies (table IV) multiplied by 5, that is to say, the death rate is calculated on the assumption that there is an average of five inhabitants per room.

During the year the sanitation of the chawls at the four centres was satisfactory. There was no long standing epidemic in any area. There were a few cases of small-pox and cholera, but they were immediately removed to hospital and the rooms disinfected.

General remarks

18. The Assistant Land Manager in charge of the chawls, Mr. V. H. Thakur, has worked hard under very discouraging circumstances. If industrial conditions remain steady I am confident the staff can repeat

the results of the previous years. Rao Saheb K. C. Advani, Executive Engineer, Housing and Suburban Division, has attended to the maintenance of the buildings with his usual care.

It has been decided that the management of the industrial housing scheme should be transferred to the Collector of Bombay under the control of Government in the Revenue Department during the year 1929-30.

I have the honour to be,
Sir,
Your most obedient servant,

R. D. BELL,
Land Manager, Development Department.

PART III

BOMBAY SUBURBAN SCHEMES

No.

OFFICE OF THE COMMISSIONER,
BOMBAY SUBURBAN DIVISION,
OLD CUSTOM HOUSE YARD :

Fort, Bombay, 3rd May 1929.

From

R. D. BELL, Esq., C.I.E., I.C.S.,
Commissioner, Bombay Suburban Division ;

To

THE SECRETARY TO THE GOVERNMENT OF BOMBAY,
Development Department, Bombay.

Subject.—Annual report on the working of the Development Department for the year 1928-29.

Sir,

I have the honour to submit the annual report on the operations of the Development Department in the Bombay Suburban Division during the year 1928-29.

I.—Suburban Schemes of the Development Department.

The sales of land were better during the year than in the previous year. The total area disposed of during the year was 82,352 square yards valued at Rs. 4,62,113 against the previous year's disposal of 26,499 square yards valued at Rs. 1,69,319. Details according to schemes are given below :—

TABLE I

Scheme No.	Disposed of during 1928-29		Total disposed of up to 31st March 1929	
	Sq. yds.	Valuation	Sq. yds.	Valuation
		Rs.		Rs.
III, Chembur	32,300	70,674	1,77,029	4,04,760
VI, Danda	13,621	1,04,940	34,117	2,59,151
VII, Khar Model Suburb ..	33,577	2,71,129	2,48,644	15,34,328
VIII, Chapel Road, Bandra ..	2,854	15,370	1,04,445	4,38,181
XVIII, Kirol North (Eastern Sector)	....	....	1,620	8,380
Total ..	82,352	4,62,113	5,65,855	26,44,800

The state of sales as compared with the previous two years and the Finance Sub-Committee's forecast at page 6 of the Special Advisory Committee's report on suburban schemes is exhibited in the following table :—

TABLE II

Statement showing disposal of lands in Suburban Schemes

Scheme No.	——	Valuation of land disposed of			Figures for 1928-29 in the forecast of the Finance Sub-Committee's report on page 6 of the report of the committee on suburban schemes
		1926-27	1927-28	1928-29	
		Rs.	Rs.	Rs.	Rs.
Suburban Scheme No. 3 (Trombay North West) Chembur Garden Suburb Sector "A"	Sales ..	3,249	10,320	9,113	27,000
	Settlements	23,000	1,800	61,561	
Suburban Scheme No. 6, Danda	Sales ..	10,295	9,408	104,940	21,375
	Settlements	..	..	..	
Suburban Scheme No. 7, Khar Model Suburb.	Sales ..	1,90,695	1,35,015	2,71,129	1,02,250
	Settlements	..	..	..	
Suburban Scheme No. 8 (Chapel Road, Bandra).	Sales ..	7,323	12,776	15,370	8,000
	Settlements	238	..	..	
Suburban Scheme No. 18, Kirol—North (Eastern Sector).	Sales ..	3,080	..	..	10,375
	Settlements	..	..	..	

The actual receipts from the sales of land and settlements in the various schemes for the last three years were as shown below :—

TABLE III

Scheme No.	1926-27	1927-28	1928-29
	Rs.	Rs.	Rs.
Suburban Scheme No. I	....	32,927	3,678
Suburban Scheme No. III ..	11,164	40,768	60,683
Suburban Scheme No. VI ..	32,326	29,756	1,07,056
Suburban Scheme No. VII ..	1,64,572	1,79,788	2,56,022
Suburban Scheme No. VIII ..	4,425	21,716	12,843
Suburban Scheme No. XV ..	9,826	....	13,990
Suburban Scheme No. XVI ..	....	300	500
Suburban Scheme No. XVIII ..	110	5,019	....

The state-aided building scheme continued to encourage the purchase of plots in Suburban Scheme No. VII Khar. The sub-joined table shows the comparative figures for the last three years.

TABLE IV

Year	No. of persons who were granted advances	Total amount advanced on land and buildings
		Rs.
1926-27	34	2,25,137
1927-28	58	3,14,252
1928-29	53	5,86,083

A further area of about 45½ acres was released by denotification during the year. The total area denotified up to the close of the year was 10,780 acres, approximately.

2. The suburban schemes of the Development Department are reviewed in detail below. The capital and revenue accounts are prepared separately by the Audit and Accounts Officer. The financial position of the various schemes is, therefore, not examined in this report; each scheme was investigated by the Finance Sub-Committee appointed by the Special Advisory Committee who have now reported to Government on the financial condition of each scheme.

3. No works were undertaken nor was there any change in the position in regard to any of the following schemes referred to in paragraph 3 of the previous year's report:—

No. 4 Trombay West.

No. 5 Malavni.

No. 9 Murzabanabad.

No. 11 Rann of Juhu.

No. 12 Suburban Trunk Roads.

No. 13 Salsette Drainage.

No. 14 Mogra.

No. 20 Khopoli.

RESIDENTIAL SCHEMES

4. *Suburban Scheme No. 3 (Trombay North-West).*—A small length of the 24th road in this scheme was completed for access to plots sold along it. In Pestomsagar Sector most of the unacquired lands are proposed to be denotified except those required for the Tata transmission line and the Bombay Municipality. The award of the lands included in the former will be declared shortly. The settlement with the Municipality is under consideration.

At Chembur (Sector " A "), half a dozen members of the St. Anthony's Homes Co-operative Society have constructed bungalows and cottages and three new buildings have been erected by other purchasers. The Society, in addition to the 100 plots purchased from Government, also bought from the heirs of the late Mr. B. S. Mhatre 16,897 square yards allotted to the latter under settlement in the scheme, and exchanged this for an equivalent area adjoining their other property. The original settlement with Mr. Wadia has been revised and, in return for the payment of Rs. 20,950 made by him, he has been allotted 13 plots measuring 23,190 square yards. Another small settlement of 8,000 square yards was also effected. Altogether sales and settlements of 32,300 square yards valued at Rs. 70,673 were effected during the year and with actual building operations now in progress, Chembur seems to have come to life. The G. I. P. Railway has taken in hand the construction of Chembur Station platform which is expected to be completed in the ensuing year. A few settlements with the owners of land on Sion-Trombay Road have been effected, while about 18 acres of land notified for acquisition have been denotified.

At Wadavli (Sector " B ") 7,584 square yards were disposed of by way of settlements. Two more settlements involving an area of 12 acres and an offer for the purchase of 25 acres are under consideration. A portion of this sector has also been denotified.

In Sector " C ", an area of 500 square yards valued at Rs. 1,250 was sold and 700 square yards disposed of under settlement.

Suburban Scheme No. 6 (*Danda*).—During the year all the roads in the scheme were handed over to the Bandra Municipality for future maintenance. 13,621 square yards, valued at Rs. 1,04,940 were disposed of. Seven bungalows have so far been built and one is in the course of construction. The introduction of a bus service along Perry and Turner roads has proved useful. The increased disposals in this scheme are due to a reduction in the rates, the division of plots as required by intending purchasers and the electrification of the locality.

Suburban Scheme No. 7 (*Khar Model Suburb*)—A portion of the 5th road in Sector " A " and portions of the 13th and 16th roads in Sectors " C " and " D " were constructed. All completed roads in Sectors " A " and " B " and also 1st and 14th roads in Sectors " C " and " D " were taken over by the Bandra Municipality during the year. Electric lights for roads in Sectors A, C and D were paid for by the Department.

As in past years the demand for land continued to be greater in this scheme than in any other. The Bandra Municipality having built market stalls, shop plots round about the market site and near the railway station were sold to the extent of 10,845 square yards valued at Rs. 1,17,625. In Sector " B " 6,000 square yards valued at Rs. 48,455 were disposed of. 400 square yards out of the promenade area have been leased to the Khar Residents' Association for recreation purposes on a nominal rent.

The sales in Sectors C and D were not satisfactory at the commencement of the year, but after a reduction in rates, an area of 16,732 square

yards valued at Rs. 1,05,048 was sold. About 500 square yards at the junction of the 1st Road and Linking Road, have been reserved for the Police Department. Another plot has been sold to the Bandra Municipality for a municipal school at a concession rent.

In all 202 bungalows have so far been constructed and 20 more are under construction in all the four sectors. The owners whose lands were affected in the proposal to extend the 1st Road to meet Carter Sea Face Road have now all agreed to give up their land for the extension free of cost and the Bandra Municipality have agreed to contribute Rs. 2,000 towards the construction of the road which will effect a great improvement in the layout of the locality.

Suburban Scheme No. 8 (*Chapel Road, Bandra*).—Only three plots measuring 2,265 square yards valued at Rs. 14,044 remain for disposal of which two are in the area reserved for shops. In all 52 bungalows have so far been constructed and 10 are under construction in this scheme. A small road-side drain was constructed in this scheme for improving the drainage of the area near the south end of Chapel Road.

Suburban Scheme No. 16 (*Shahar*).—In the Shahar Sector a few small bits of land lying near the railway lines remain and will be sold to adjoining owners.

The layout of the Kole-Kalyan Sector was revised. Settlements with three owners involving 1,915 square yards valued at Rs. 3,787 were effected. The area remaining for disposal is about 75,000 square yards valued at approximately Rs. 2 lakhs.

In the Andheri Sector the layout is under revision. An area of 19½ acres at Vile Parle is under settlement with the Manglorean Garden Homes Society.

Suburban Scheme No. 18 (*Kirol North*).—There has been no demand for land in this scheme, although selling rates were reduced. The western sector of this scheme will be sold, if possible, in its present condition without incurring any expenditure on development.

Industrial Schemes

5. *Suburban Scheme No. 1* (*Kurla-Kirol*) *and No. 2* (*Trombay North-East*).—There was no development in these schemes during the year.

Suburban Scheme No. 15 (*Ambernath*).—An area of 6,583 square yards was sold to the Western India Match Company for extending their factory.

Water-Supply Schemes

6. *Suburban Scheme No. 19* (*Salsette Water-Supply*).—The following sub-schemes and extensions for water supply were completed during the year :—

	Cost
	Rs.
(1) Water-supply to Versowa ..	22,000
(2) Water-supply to Amboli village ..	4,300

	Cost Rs.
(3) Extension of water-supply to Willingdon South	1,915
(4) Extension of water-supply to Santa Cruz Town Planning Scheme No. 4.	3,700
(5) Extension of water-supply to 1st Road in Sectors C and D of Khar ..	4,350
(6) Extension of water-supply to Dumbell Road survey Nos. 124 and 170 at Vile Parle	650
(7) Extension of water-supply to Carter Road at Andheri	380

The pressure in all the systems continued to be satisfactory throughout the year except at Khar in January 1929 owing to the choking of filters at the Tulsi Lake. This however did not last for more than a fortnight after which the normal pressure was again available.

A statement showing the figures of consumption, number of connections, etc., in each sub-scheme is attached to this report. (See appendix A).

Suburban Scheme No. 21 (Ambernath Water-Supply).—The supply to Badlapur village was completed during the year at a cost of about Rs. 8,900. The total number of connections taken up to 31st March 1929 was 26.

The details of consumption and of connections, etc., for the last two years under this scheme are as under (See also appendix A) :—

TABLE V

	1927-28	1928-29
(*a*) Number of connections in the scheme	23	25
(*b*) Average daily consumption in the scheme	Gallons. 1,21,000	Gallons. 85,500
	Rs.	Rs.
(*c*) Cost of maintenance, etc.	19,426	19,463
(*d*) Receipts from sales of water and rent for meters	34,210	26,922

RAILWAY SCHEMES

7. *Suburban Scheme No. 17 (Central-Salsette Tramway).*—This tramway was transferred to the G. I. P. Railway last year and the service commenced to run in January 1928 between Andheri and Wadavli. The passenger traffic is fairly good. The fare for the whole distance (8 miles) is two annas.

Suburban Scheme No. 22 (Kurla-Trombay Railway).—The G. I. P. Railway are now in charge of the whole of the Kurla-Trombay Railway from Kurla Station to Mandala, a distance of about 4½ miles.

Electric Supply Schemes

8. *Suburban Scheme No. 23 (Ambernath Electric Supply).*—The details of the consumption, cost, etc., for the two years are given below :—

Table VI

	1927-28	1928-29
(1) Total units sold	4,67,520	5,65,585
(*a*) for power	4,15,720	4,98,862
(*b*) for lighting	51,800	66,723
	Rs.	Rs.
(2) Working cost	33,141	37,747
(3) Revenue	48,622	54,927

Miscellaneous

9. *Suburban Scheme No. 10 (Aerodrome at Gilbert Hill, Andheri).*—There has been no development in this scheme during the year.

10. *The area under the control of the Collector.*—The area under the management of the Collector, Bombay Suburban District, was substantially the same as last year except in Suburban Scheme No. 17 (Central-Salsette Tramway), in which there is a decrease of 31 acres due to the sale of land to the Salsette Co-operative Agricultural Association, Limited. The sub-joined table shows the areas in the various schemes under the management of the Collector, Bombay Suburban District, and the income derived from them during the year.

Table VII

Name of scheme	Approximate area under management	Income
	Acres	Rs.
Suburban Scheme No. 1 (Kurla-Kirol)	458	6,440
Suburban Scheme No. 2 (Trombay, North-East) ..	238	5,355
Suburban Scheme No. 3 (Trombay, North-West) ..	203	5,173
Suburban Scheme No. 6 (Danda)	11	200
Suburban Scheme No. 7 (Khar)	35	2,825
Suburban Scheme No. 8 (Chapel Road)	2	12
Suburban Scheme No. 10 (Aerodrome)	100	2,647
Suburban Scheme No. 15 (Ambernath)	1,209	15,748
Suburban Scheme No. 17 (Central-Salsette Tramway)	57	2,331
Suburban Scheme No. 18 (Kirol, North)	43	492
Total ..	2,356	41,223

The following table compares the income during the year with the income during the preceding three years :—

TABLE VIII

Scheme number	Income for 1925-26	Income for 1926-27	Income for 1927-28	Income for 1928-29
	Rs.	Rs.	Rs.	Rs.
Suburban Scheme No. 1	5,079	6,551	7,274	6,440
Suburban Scheme No. 2	3,422	3,655	3,662	5,255
Suburban Scheme No. 3	1,251	2,760	4,078	5,173
Suburban Scheme No. 6	..	..	376	200
Suburban Scheme No. 7	1,400	1,945	2,785	2,825
Suburban Scheme No. 8	..	..	15	12
Suburban Scheme No. 10	..	84	2,147	2,647
Suburban Scheme No. 15	6,116	7,326	15,364	15,748
Suburban Scheme No. 17	236	648	2,101	2,331
Suburban Scheme No. 18	662	533	1,075	492
Total ..	18,166	23,502	38,877	41,223

Besides the land in these Suburban Schemes some land together with houses on the Kurla Diversion Road and the area acquired for the Imperial Airship Scheme are under the management of the Collector. The income derived from these estates is given in the following table :—

TABLE IX

Name	Income in 1927-28	Income in 1928-29
	Rs.	Rs.
Kurla Diversion Road	600	668
Imperial Airship Scheme	911	970

The income derived from the Kurla Diversion Road Scheme is credited to the Development Department funds and that from the Imperial Airship Scheme is credited to the Government of India.

11. *Land Acquisition.*—Only a few small pieces of land required here and there for rounding up the boundaries of a scheme or a property under a settlement were acquired. In Chembur (Suburban Scheme No. 3) 45 acres, 26 gunthas and 4 annas were denotified.

12. *General Remarks on Suburban Schemes.*—Though there was no improvement in the prices of land owing to industrial and commercial conditions in Bombay, building activity in the Bombay Suburban District was satisfactory during the year, and the number of plans sanctioned for the erection of buildings in suburban and town planning schemes rose from 232 in 1926-27 and 289 in 1927-28 to 357 during the year under report.

13. *Town Planning Schemes.*—A complete list of the town planning schemes in the Bombay Suburban Division is given in appendix B showing for each scheme the approximate area, the cost of works and the stage which it has reached.

The work during the year is reviewed below :—

(*a*) Government sanctioned the Vile Parle Town Planning Scheme No. 6. The construction of all works, which will shortly be completed, will open a developed area of 1½ lakhs square yards ready for residential purposes.

(*b*) Santa Cruz Town Planning Scheme No. 5 is still pending.

(*c*) The Bandra Municipality have decided to take up Bandra Town Planning Scheme No. 3 which had been in abeyance for the last two years, and the preliminary work is in progress.

(*d*) The award in Borivli Town Planning Scheme No. 2 has been published. The scheme papers will shortly be forwarded to the Tribunal of Arbitration and on receipt of its decision, the final scheme will be drawn up by the Arbitrator and submitted to Government through the Notified Area Committee, Borivli.

(*e*) The award in respect of Ghatkopar Town Planning Scheme No. 2 having been published by the Arbitrator and the decision of the Tribunal of Arbitration obtained thereon, the final scheme will shortly be drawn up and submitted to Government through the Ghatkopar-Kirol Municipality for final sanction.

(*f*) The Andheri Town Planning Scheme No. 6 is in the arbitration stage. The work of demarcation of roads and final plots has been completed. The award will be published in due course and the final scheme submitted to Government after receipt of the decision of the Tribunal of Arbitration on the award. It is expected to be completed before the next monsoon.

(*g*) Two draft schemes, *viz.*, Andheri Town Planning Scheme No. 5 and Bandra Town Planning Scheme No. 4 remained under preparation and Juhu Town Planning Scheme No. 1 lapsed. The question of the cancellation of Vile Parle Town Planning Scheme No. 5 is under the consideration of Government.

32 certificates of tenure and title were issued to the owners of final plots in the completed town planning schemes during the year.

General Remarks on Town Planning Schemes

Andheri Town Planning Scheme No. 2 is still unpopular because of the quarrying operations in Gilbert Hill in its vicinity. It has been decided to reduce the upset prices and to put up some plots to auction.

The landholders in Juhu Town Planning Scheme No. 1 endeavoured to save this scheme at the last moment but were too late in their effort. It is bound to be revived. It is very desirable that the development of Juhu should be carried out in an orderly fashion and its amenities preserved as far as practicable.

Santa Cruz Town Planning Scheme No. 3 was completed at a cost of Rs. 94,500 as against Rs. 1,48,335 the estimated cost. All roads in this scheme have been handed over to the Notified Area Committee, Santa Cruz, for maintenance.

II.—Bombay Suburban Survey.

14. The work of checking and maintenance of 40′ survey sheets has been transferred to the District Inspector of Land Records, Andheri, who has been given certain powers of the Superintendent of Land Records and who works under the direct supervision of the Director of Land Records. This arrangement was sanctioned in October 1928.

The amalgamation of the suburban survey staff and the district survey office staff was also sanctioned but is found, by actual experience gained, to be inconvenient and difficult to work. The question of the appointment of two cadastral surveyors to work as circle inspectors under the Mamlatdar is under consideration.

15. I have once more to acknowledge the good work of Rao Saheb K. C. Advani, Executive Engineer, Housing and Suburban Division, under the superintendence of Mr. A. X. Moraes, Superintending Engineer, Northern Circle, in connection with the execution of works in departmental and town planning schemes and the administration of the water and electric supply schemes. Mr. K. R. Doctor has been an excellent Personal Assistant to the Land Manager in the disposal of lands, as Arbitrator in town planning schemes and as the officer in charge of land acquisition and the legal proceedings connected therewith. Mr. S. M. Bharucha, Collector, Bombay Suburban District, has been closely concerned with all the various activities of the Development Department in his district, and has carried out his share of the work with care and efficiency. Mr. H. St. C. Smith has, as usual, done excellent work as Assistant Commissioner.

I have the honour to be,
Sir,
Your most obedient servant,

R. D. BELL,
Commissioner, Bombay Suburban Division.

APPENDIX A

Statement showing the figures of consumption, number of connections, etc., in each sub-scheme (vide *paragraph 6 of the report*)

Serial No.	Name of Scheme	Number of connections in the scheme on		Average daily consumption in gallons	
		31st March 1928	31st March 1929	1927-28	1928-29
1	2	3	4	5	6
1	Andheri including Marol, Versowa and Amboli.	285	359	1,28,500 nearly.	1,20,785
2	Santa Cruz, Juhu and Khar ..	485	586	2,14,900	2,41,100
3	Vile Parle	95	146	13,700	24,570
4	Bandra	....	....	4,00,100	4,68,100
5	Kurla	....	....	6,50,000	6,32,850
6	Trombay, Suburban Schemes II and III.	45	53	39,600	32,500
7	Ghatkopar	59	71	15,300	17,500
8	Ambernath	23	25	1,21,000	85,500

Serial No.	Name of Scheme	Cost of maintenance including purchase of water from Bombay Muny. and cost of new meters supplied		Receipts from sales of water and rent of meter, etc.	
		1927-28	1928-29	1927-28	1928-29
1	2	7	8	9	10
		Rs.	Rs.	Rs.	Rs.
1	Andheri including Marol, Versowa and Amboli.	22,904	18,336	41,054	42,525
2	Santa Cruz, Juhu and Khar ..	34,233	33,152	76,772	80,996
3	Vile Parle	7,907	4,805	3,978	9,426
4	Bandra	45,417	53,307	64,132	73,997
5	Kurla	72,376	75,440	1,00,923	1,05,172
6	Trombay, Suburban Schemes II and III.	9,353	7,759	8,268	12,090
7	Ghatkopar	9,576	4,033	3,653	6,213
	Total, Suburban Scheme 19 ..	2,01,766	1,96,832	2,98,780	3,30,419
8	Ambernath*	19,426	19,463	34,210	26,922

(1) Figures in columns 7 and 8 show actual expenditure by the divisional office. They do not include interest or overhead charges, etc.

(2) Figures in columns 9 and 10 do not include amounts received as premium or connection fees, etc.

**Suburban Scheme 21.*—The annual rent of Rs. 610 for the telephone line to Ambernath has had to be paid twice in 1928-1929 the second time for 1929-30 in advance. The decrease in demand is due to closing down of the Dharamsi Morarji Mills.

R. D. BELL,

Commissioner, Bombay Suburban Division.

gitized with financial assistance from th
Government of Maharashtra
on 20 July, 2017

APPENDIX B

(*Vide* paragraph 13 of the report)

List of town planning schemes in the Bombay Suburban Division

Locality and Scheme	Approximate area in acres	Cost of works under Section 3	Present state
Bandra		Rs.	
T. P. Scheme No. 1 ..	5·68	22,647	Complete.
Do. No. 2 ..	21·82	14,432	Do.
Do. No. 3 ..	240·70	*Nil.*	Draft scheme sanctioned and scheme with Arbitrator.
Do. No. 4 ..	63·75	72,347	Draft scheme under preparation.
Do. No. 5 ..	1·08	*Nil.*	Complete.
Santa Cruz			
T. P. Scheme No. 1 ..	36·71	20,930	Complete.
Do. No. 2 ..	145·15	2,72,440	Do.
Do. No. 3 ..	46·81	1,48,335	Do.
Do. No. 4 ..	69·96	1,44,191	Do.
Do. No. 5 ..	120·63	1,85,000	Draft scheme sanctioned and scheme with Arbitrator.
Juhu			
T. P. Scheme No. 1 ..	133·14	1,00,000	Draft scheme under preparation.
Vile Parle			
T. P. Scheme No. 1 ..	36·49	37,877	Complete.
Do. No. 2 ..	86·01	2,01,579	Do.
Do. No. 3 ..	56·70	1,26,457	Do.
Do. No. 4and 4A.	5·69	11,990	Do.
Do. No. 5 ..	92·93	1,65,282	Draft scheme under preparation.
Do. No. 6 ..	38·21	64,342	Final scheme sanctioned and works in progress.
Andheri			
T. P. Scheme No. 1 ..	10·39	1,797	Complete.
Do. No. 2 ..	52·64	32,530	Do.
Do. No. 5 ..	87·83 (Sector A)	2,39,413	Draft scheme under preparation.
Do. No. 6 ..	55·72	1,53,465	Draft scheme sanctioned and scheme with Arbitrator.
Malad			
T. P. Scheme No. 1 ..	44·73	24,111	Complete.
Borivli			
T. P. Scheme No. 1 ..	76·06	8,309	Complete.
Do. No. 2 ..	102·82	6,690	Draft scheme sanctioned and scheme with Arbitrator.
Ghatkopar			
T. P. Scheme No. 1 ..	14·55	37,723	Complete.
Do. No. 2 ..	43·45	*Nil.*	Scheme with Arbitrator for revision.

R. D. BELL,
Commissioner, Bombay Suburban Division.

BOMBAY: PRINTED AT THE GOVERNMENT CENTRAL PRESS.